

### **Remarks**

Claims 17 - 40 are pending. Favorable reconsideration is respectfully requested.

Applicants wish to express their appreciation to Examiner Peng for his careful review of the claims, which unfortunately resulted in a new, non-final rejection. Claims 18 - 20, 24 - 27, 29, and 30 have been objected to, but indicated as allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims. Accordingly, claim 17 has been amended by incorporating the limitations of former claims 18 - 20, which had been dependent on claim 17. These claims should therefore be allowable. Claims 18 - 20 have been cancelled.

In like manner, claim 21 (which stands rejected) has been rendered independent by incorporating the limitations of its base claim, claim 17, and also of claim 22 (which stands rejected) and then also the limitations of claims 24 - 26 (objected to only). Thus, claims 24 - 26 have been written in independent form by amending claim 21, and claim 21 as amended contains all limitations of its base claim (17), claims 24 - 26, and the intervening claim (22). Claim 21 should be allowable as amended. Claims 22 - 27 and also 29, have been cancelled.

Claims 29 and 30 have been cancelled.

New claims 32 - 39 have been added to more particularly point out and distinctly claim certain embodiments of Applicants' invention. Claim 32 pertains to baking molds which prepared from a composition catalyzed by a rhodium or iridium catalyst, and in this respect is similar to claim 16, which has been cancelled, but claim 32, unlike claim 16, also requires the unsaturated R<sup>1</sup> groups to be one of those specifically enumerated. These enumerated unsaturated groups do not include acrylate or methacrylate groups. Claim 39 is dependent on claim 32, and requires the baking mold to be a confectionary, butter, ice cream, or patisserie mold, or a baking sheet. Claim 33 is dependent on claim 32 and requires the R groups of the organopolysiloxanes to be methyl and/or phenyl.

New claim 34 also requires a rhodium or iridium catalyst, but limits the organosilicon compounds to consist essentially of those specifically enumerated, thus excluding significant amounts of other organosilicon compounds such as organopolysiloxane oils. Claim 35 requires the R groups of claim 34 to be methyl or phenyl, while claims 36 - 38 recite specific rhodium and iridium catalysts. Claim 40 requires the baking mold to be a butter, patisserie, ice cream, or confectionary mold, or a baking sheet. Support for the claim limitations may be found in the original claims and at the following locations: patisserie mold, ice cream mold, page 1, lines 1 - 3; R<sup>1</sup> groups, page 5, lines 10 - 14; rhodium catalysts, page 7, lines 6 - 16; iridium catalysts, page 7, lines 17 - 22.

Claims 17, 21 - 22, 28 and 31 had been rejected over Miyoshi EP 1 043 363 ("*Miyoshi*") in view of Ebbrecht U.S. Patent 5,552,506 ("*Ebbrecht*"). Applicants submit that in view of the claim amendments made, that these claims are allowable (claims 22 and 28 have been cancelled). However, in view of the newly added claims, Applicants believe that discussion of the prior art and the unobvious differences between the prior art references and the subject invention is warranted.

In this respect, Applicants wish the Examiner to also reconsider his view that the term "baking mold" is an intended use. The subject invention is only directed to molds for food items, and the term "baking mold" is defined in this manner in the specification. Thus molds which are "baked" in a furnace and include, in the mold cavity, thermoset plastics, low melting metals, etc., are not part of the invention. The case law established that when words in the preamble "breathe life and meaning" into the claim, the words should be given effect, and are not merely an intended use. That is the case here. One skilled in the art recognizes that a silicone patisserie mold, for example one used to bake muffins, and which have now become quite popular, is within the scope of the claims, but that a silicone mold used for dental impressions or casting of small parts in low melting alloys, is not. The Examiner may wish to refer to the following cases in this request: *Kropa v. Robie*, 88 USPQ 478, 481 (CCPA 1951) (not an intended use when the disputed limitation "is essential to point out the invention defined"); *Corning Glass Works v. Sumitomo Electric U.S.A.*, 9 USPQ 2d 1962

(Fed. Cir. 1989) (not an intended use where the disputed limitation breathes “life and meaning” into the claims).

*Miyoshi* does not pertain to baking molds at all, but rather to “mother molds” (whatever that means) which retain release properties for extended periods. In the Examples, polyurethane parts are molded. The compositions of *Miyoshi* contain a silicone oil which exudes to the surface, and which is responsible for the release characteristics. One skilled in the art of producing baking molds used for foodstuffs would not look to *Miyoshi* for a solution to the problems of discoloration which occurs with Pt hydrosilylation catalysts, as the *Miyoshi* compositions, containing an exudant oil, would not be suitable for foodstuff applications. Moreover, due to the continued loss of oil into the food product (which, as opposed to polyurethanes, contain numerous fatty ingredients and tend to absorb oil rather than the oil remaining on the surface), the non-stick properties would soon be lost.

*Miyoshi* does indeed list rhodium catalysts as one potential class of catalysts, and identified two such catalysts. However, this list is typical of many addition-curing silicone patents which list “transition metal catalysts” or “noble metal catalysts” or “platinum group catalysts”. Virtually all addition-curable silicones employ platinum catalysts, as *Miyoshi* does in all examples. *Miyoshi* does not teach or suggest that rhodium catalysts can produce a transparent and colorless elastomer (in the absence of colorants purposefully added), nor would he be expected to, since there is not reason why his “mother molds” should be colorless. The recitation of various platinum, palladium, and rhodium catalysts, more broadly “platinum group catalysts (page 4 [0023] line 2) appears to be nothing more than an invitation to experiment, with no “blaze marks” to point one skilled in the art to use rhodium instead of platinum in the field to which Applicants’ invention pertain. *Miyoshi* treats all catalysts alike, whereas Applicants have found that there are surprising and unexpected differences, differences not taught, suggested, or even discussed by *Miyoshi*.

*Ebbrecht* is a rather curious patent which is specifically directed to liquid, photocurable acrylate-functional silicones whose preparation is catalyzed by rhodium catalysts.

According to *Ebbrecht*, platinum catalysts used to prepare acrylate-functional silicones by reaction of a di- or triacrylate such as hexanediol diacrylate with an Si-H functional silicone proceeds not in the manner taught by the art prior to *Ebbrecht*: formation of Si-C bonds at one of the acrylate unsaturated moieties, but rather by formation of Si-O-C linkages which are hydrolyzable. *Ebbrecht* discovered that when employing acrylates, use of rhodium provides Si-C bonds by 1,2-addition. The present claims do not include the use of acrylates, nor are acrylates mentioned anywhere in the specification, with good reason. Polar acrylate groups, particularly those of *Ebbrecht* which not only include a free photocurable acrylate group, but also an acrylate group Si-C bonded to silicone which retains its polar ester functionality but is no longer unsaturated, do not have suitable release properties for baking molds due to the polarity of these groups. Moreover, the acrylate groups themselves are bonded to the starting glycol or polyol by ester linkages which are not stable to hydrolysis, particularly in baked goods which often contain baking soda or baking powder, both of these being bases which catalyze cleavage of ester linkages, especially under hot, humid conditions. One skilled in the art would not be motivated to use such compounds in baking molds, and to ensure that this is clear, acrylates have been excluded from Applicants' claims 32, 34 by limiting the unsaturated R groups to those enumerated.

Moreover, *Ebbrecht* does not disclose an elastomer produced by hydrosilylation addition polymerization, but to photochemically cured products used as one-time release coatings on papers and films. No hydrosilylation catalyst is employed. Instead, a photocatalyst (Darocure® 1173, Ciba Geigy) is employed together with ultraviolet light.

In *Ebbrecht*, the rhodium catalysts produced a liquid and often yellow product. Baking molds are solid elastomers and are desired to be colorless in the absence of added colorants (which may be added for aesthetic purposes). In attempting to reach these goals, one skilled in the art would not look to *Ebbrecht*, as many of his rhodium catalyzed liquid products are yellow colored, and all are liquid, whereas conventional Pt catalysts (Example 8) produced a soft, white, gelatinous mass (which is at least closer to a solid than is a liquid). Due to the color *Ebbrecht* often obtained with rhodium catalysts, with no color obtained when using Pt

catalysts, one skilled in the art, desirous of producing a solid article with no color, would be led by *Ebbrecht's* Examples and Comparative Example, to employ Pt rather than Rh. However, in addition-crosslinked silicones which cure by hydrosilylation where the addition of Si bonded hydrogen across a double bond is metal catalyzed, and where acrylates are not employed, the reaction products are desirably transparent and colorless. *Ebbrecht* does not teach or suggest this result.

*Ebbrecht* and *Miyoshi* are not believed combinable, as the compositions *Miyoshi* crosslinks are hydrosilylation-cured elastomers which contain no acrylates. Use of acrylates is the sole reason *Ebbrecht* employed rhodium. However, he did not employ it to produce an elastomer, but a liquid product which was later cured to an elastomer. *Ebbrecht's* products are photocrosslinked (addition of acrylate double bonds to acrylate double bonds) and not addition cured by hydrosilylation, reaction of an alkenyl group with silicon-bonded hydrogen, as are those of *Miyoshi*. One skilled in the art would not be motivated to combine these references.

Even were combination proper, the combination still does not teach or suggest Applicants' invention, since Applicants use rhodium catalysts to cure by hydrosilylation to produce an elastomer, while *Ebbrecht* cures by photocuring. Photocuring is a salient feature of *Ebbrecht*, and the combination of *Ebbrecht* and *Miyoshi* must include this feature. One cannot pick and choose isolated teachings from a reference while ignoring the reference' salient teachings. *In re Wesslau*, 147 USPQ 391, 393 (CCPA 1965). Applicants do not photocure, nor do they employ acrylate-functional silicones, another salient feature of *Ebbrecht*. The claims are patentable over the combination of *Ebbrecht* and *Miyoshi*.

Applicants submit that the claims are now in condition for Allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the Application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Respectfully submitted,

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